

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2016

BIC1014 – INFORMATION SYSTEMS CONCEPTS

(All sections / Groups)

13 OCTOBER 2015
9:00 a.m. – 11:00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 8 pages with 2 sections.
2. Attempt **ALL** questions in Section A. Attempt **THREE (3)** out of **FOUR (4)** questions in Section B. All questions in Section A carry equal marks. The distribution of the marks for each question in Section B is given.
3. Please shade your answers for Section A in the MCQ sheet, and write your answers for Section B in the Answer Booklet provided.

SECTION A (40 Marks)Attempt **ALL** questions.

1. Below are the reasons why businesses invest in information technology, *except*:
 - A. To achieve operational excellence.
 - B. To improve employee self-assurance.
 - C. To strengthen customer and supplier intimacy.
 - D. To improve management decision making.
2. Below are strategies for organizations to achieve competitive advantage, *except*:
 - A. Charging less for superior products.
 - B. Provide better customer service.
 - C. Provide better response to suppliers and customers.
 - D. Track the flow of transactions through the organization.
3. Camsys's student attendance summary report is an example of the _____ activity of an information system.
 - A. input
 - B. processing
 - C. output
 - D. performance
4. Which stage in the problem solving model strives to determine the causes for the existence of problems?
 - A. Problem identification
 - B. Solution design
 - C. Choice
 - D. Implementation
5. Which information system below is able to produce summarized reports, and can drill down to produce specific information requested but have limited analytical capability?
 - A. Transaction processing systems
 - B. Management information systems
 - C. Decision support systems
 - D. Executive support systems
6. Below are the key functionalities of enterprise resource planning (ERP) systems, *except*:
 - A. Integrate data from key business processes into single system.
 - B. Speed communication of information throughout firm.
 - C. Enable managers to assemble overall view of operations.
 - D. Coordinate business processes that deal with customers in sales, marketing, and customer service.

Continued

7. You work for a training and consultancy organization that offers short courses, training programs, and business consultancy services to small and medium sized entrepreneurs. The organization is striving to collect relevant knowledge and make it available wherever needed in the organization to improve business processes and management decisions. Which system will best help the organization to achieve these needs?
- A. Enterprise resource planning system
 - B. Customer relationship management system
 - C. Knowledge management system
 - D. Supply chain management system
8. Which of the collaborative tool below represents this statement:
- “Organization’s use of social media (such as Chatter and Yammer) to connect people who share similar business interest or activities.”*
- A. Cloud collaboration services
 - B. Enterprise social networking tools
 - C. Virtual worlds
 - D. Virtual meeting systems (Telepresence)
9. Which of the following is not one of the Porter’s competitive forces model?
- A. Competitors
 - B. Suppliers
 - C. Customers
 - D. Employees
10. Organizations can raise their bargaining power over their suppliers by:
- A. Having more suppliers
 - B. Having fewer suppliers
 - C. Having only one supplier
 - D. Sourcing for global suppliers
11. Which of the statement below best describe business process management (BPM)?
- A. Conformance to specifications and absence of variation from specifications of products or services.
 - B. Elimination of old processes, replacement with new processes, in a brief time period.
 - C. The practice of continuously improving business processes.
 - D. Activities in the business where competitive strategies can best be applied and where information systems are most likely to have a strategic impact.
12. Nike allowing customers to customize their shoes is an example of which strategy?
- A. Low-cost leadership
 - B. Product differentiation
 - C. Focus on market niche
 - D. Strengthen customer and/or supplier intimacy

Continued

13. One of the candidate ethical principles is the *golden rule*. Which of the statement below represent this principle?
- A. Do unto others as you would have them do unto you.
 - B. If an action is not right for everyone to take, it is not right for anyone.
 - C. If an action cannot be taken repeatedly, it is not right to take at all.
 - D. Take the action that achieves the higher or greater value.
14. Below are technology trends that raise ethical issues, *except*:
- A. Dependence on computer systems for critical operations.
 - B. Organizations maintaining detailed databases on individual.
 - C. Tracking of individual cell phones.
 - D. Setup and operations of IT that produces minimal carbon footprint.
15. _____ are tiny files downloaded by web sites into users' hard drive to identify their browser and track visits.
- A. Cookies
 - B. Web bugs
 - C. Virus
 - D. Spyware
16. Below are the technical solutions for protecting the privacy of user web surfing habits, *except*:
- A. Anonymous browsing tools.
 - B. Cookie prevention and management.
 - C. Set private, do not track browsing features.
 - D. Implement opt-out policy.
17. _____ are older transaction processing systems created for older computers that continue to be used to avoid the high cost of replacing or redesigning them.
- A. Mainframes
 - B. Legacy system
 - C. Server
 - D. Data management system
18. A _____ is mathematically more powerful and has better graphics-processing capabilities than a personal computer.
- A. tablet
 - B. personal digital assistant
 - C. smartphone
 - D. workstation
19. _____ is the process of presenting a set of computing resources (such as computing power or data storage) so that they can all be accessed in ways that are not restricted by physical configuration or geographic location.
- A. Virtualization
 - B. Quantum computing
 - C. Nanotechnology
 - D. Storage networking

Continued

20. Below are input devices, *except* for:
- A. Pen based input
 - B. Sensors
 - C. Speaker
 - D. Magnetic ink character
21. In technical terms, rows in relational database tables are commonly referred as:-
- A. Primary key
 - B. Tuples
 - C. Foreign key
 - D. Field
22. An entity relationship diagram is used to present _____.
- A. tables' relationships in a relational database
 - B. rows' relationships in a relational database
 - C. columns' relationships in a relational database
 - D. fields' relationships in a relational database
23. The process of streamlining complex groups of data to minimize redundant data elements and awkward many-to-many relationships, and increase stability and flexibility is called:
- A. Referential integrity
 - B. Redundancy check
 - C. Data streamlining
 - D. Normalization
24. Below are database management systems for creating, storing, organizing and accessing data from a database, *except*:
- A. Oracle Database
 - B. Microsoft Access
 - C. Microsoft SQL Server
 - D. Microsoft Content Management
25. Which of the following lets you connect one or more computers to other computers, networked devices, or even other networks?
- A. Network interfaces
 - B. Switch
 - C. Client computer
 - D. Network operating system
26. The _____ layer is responsible for addressing, routing and packaging data packets called IP datagrams.
- A. Application
 - B. Transport
 - C. Internet
 - D. Network

Continued

27. _____ cables are thickly insulated copper wires, which are capable of high-speed data transmission and less subject to interference than twisted wire.
- A. Coaxial
 - B. Fibre-optic
 - C. Wireless transmission
 - D. Broadband
28. Domain Names System is a hierarchical system structure with the following domains, *except*:
- A. Internet root domain
 - B. Second-level domains
 - C. Third-level domains
 - D. Fourth-level domains
29. A _____ is a rogue software program that attaches itself to other software programs or data files in order to be executed.
- A. worm
 - B. Trojan horse.
 - C. bug
 - D. virus
30. A hacker may use _____ to flood a network server or Web server with many thousands of false communications or requests for services to crash the network.
- A. denial-of-service attacks
 - B. spoofing
 - C. sniffing
 - D. war driving
31. One popular tactic in a form of spoofing known as _____ has been use to set up fake Web sites or sending e-mail messages that look like those of legitimate business to ask users for confidential personal data.
- A. denial-of-service attacks
 - B. war driving
 - C. phishing
 - D. sniffing
32. An eavesdropper perform _____ practice by driving by a building or park outside the building to intercept wireless network traffic.
- A. denial-of-service attacks
 - B. war driving
 - C. phishing
 - D. sniffing
33. Which of the following dimension of e-commerce technology allows merchants to engage consumers in a dialog on global scale?
- A. Ubiquity
 - B. Personalization
 - C. Richness
 - D. Interactivity

Continued

34. _____ reduces or eliminates the business process layers in a distribution channel.
- A. Disintermediation
 - B. Business process reengineering
 - C. Market segmentation
 - D. Dynamic pricing
35. Compared to digital goods, traditional goods have _____.
- A. lesser pricing flexibility
 - B. higher marketing costs
 - C. lower production costs
 - D. lower inventory costs
36. _____ involves sales of goods and services among businesses through electronic network.
- A. B2B e-commerce.
 - B. C2C e-commerce.
 - C. B2G e-commerce.
 - D. B2C e-commerce.
37. The type of decisions that can be made based on not well understood or agreed-on procedure is called a(n) _____ decision.
- A. structured
 - B. unstructured
 - C. semistructured
 - D. procedural
38. A parameterized report assists user to _____.
- A. drill down to more finely grained information
 - B. create their own reports based on custom queries
 - C. view data according to different dimensions of the data
 - D. view overall firm performance data
39. The strategy used in expert systems to search through the collection of rules and formulate conclusion is called the _____.
- A. inference engine
 - B. knowledge management
 - C. knowledge base
 - D. search engine
40. In _____, knowledge and past experiences of human specialists are represented as cases and stored in a database for later retrieval when user encounters a new case with similar parameters.
- A. fuzzy logic systems
 - B. case-based reasoning
 - C. expert systems
 - D. decision support systems

Continued

SECTION B (60 Marks)

Attempt any **THREE (3)** out of **FOUR (4)** questions.

QUESTION 1

- a) Both Management Information System (MIS) and Decision Support System (DSS) serve middle level managers in an organization. Explain **THREE (3)** key functionality differences between MIS and DSS.
(6 marks)
- b) Organizations are turning towards using information system (IS) to achieve competitive advantages. List and explain any **TWO (2)** IS strategies organizations are using to deal with competitive forces. For each strategy, provide an example.
(8 marks)
- c) Explain what fair information practices are. List and explain the **TWO (2)** core principles of the fair information practices.
(6 marks)

(TOTAL : 20 marks)

QUESTION 2

- a) How does multinational retail corporations such as Walmart use RFID technology for inventory control and supply chain management? Explain.
(10 marks)
- b) One of the main technologies used today for networks is client/server computing. Explain how client/server computing technology works.
(6 marks)
- c) What is the key advantage packet switched networks have over circuit switched networks? Explain.
(4 marks)

(TOTAL : 20 marks)

Continued

QUESTION 3

- a) Your superior is proposing to install a wireless network in the company that will assist the employees in accessing and retrieving information from the network more conveniently while solving daily tasks. Your superior is currently seeking opinions and suggestions from the employees on this proposition.

You are aware of the security challenges in implementing wireless network. Advice your superior by providing **FOUR (4)** main security challenges the company might face after the implementation of the wireless network in the organization.

(8 marks)

- b) Describe **THREE (3)** reasons behind the expanded sales on digital goods in digital markets.

(6 marks)

- c) An e-commerce business may rely on free/freemium revenue model in earning revenue for the business. Describe the free/freemium revenue model. Provide a business scenario where this revenue model can be applied.

(6 marks)

(TOTAL : 20 marks)

QUESTION 4

- a) Briefly explain **FIVE (5)** reasons why public networks such as the Internet are more vulnerable than private networks.

(10 marks)

- b) Briefly describe predictive analytics. Provide **FOUR (4)** examples or scenarios where predictive analytics can be applied.

(10 marks)

(TOTAL : 20 marks)

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